

Course Code: ZOO 304

Course Title: Laboratory course on Aquaculture

Number of Credits: 3

Effective from AY: 2020 -21

Prerequisite for the Course:	Knowledge on Fishery biology and its application or Environmental Physiology	
Objectives:	Laboratory training based on skilled based courses on Fish biology.	
Content	Module 1: 1. Collection of fish pituitary gland and histological studies of pituitary gland. 2. Histological studies of developmental stages of ovary and testes. 3. Study of fish eggs and embryonic developmental stages. 4. Observations on gonadal maturation of prawns. 5. Identification of larval stages of important crustaceans. 6. Identification of common ornamental fishes. 7. Identification of live food organisms	12 x 2 hrs
	Module 2: 1. Culture and maintenance of live feeds such as Artemia and algae 2. Measurement of DO, total hardness and salinity of the water bodies. 3. Preparation of fish feed in laboratory 4. Quality control of fishes: Crude protein analysis of fish muscle by lowry method. 5. Detection of organoleptic changes in fish. 6. Isolation and maintenance of bacteria from fishes. . 7. Gram staining of bacteria.	12 x 2 hrs
	Module 3: Every student must go for the Internship programme for 1 month . DC will select the Institution / Industry with in Goa for the Internship programme at State fishery farm, Private fish farm, Fish processing Industries.	